Data Collection Manager (DCM) Commands

This module describes the commands used to set and configure the Data Collection Manager (DCM) and bulkstat commands.

For more information about DCM, see the DCM chapter in the *System Management Configuration Guide for Cisco NCS 5500 Series RoutersSystem Management Configuration Guide for Cisco NCS 540 Series RoutersSystem Management Configuration Guide for Cisco NCS 560 Series Routers*.

add cmd

To add a show command to a command data set, use the **add cmd** command in command data set mode. To remove a show command from the data set, use the **no** form of this command.

add cmd *command-line*
no add cmd *command-line*

Syntax Description	*command-lne* Specifies show commands for which the output should be collected.

Command Default None

Command Modes Command bulkstat data set configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **add cmd** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat data show-snmp type command
RP/0/RP0/CPU0:router (config-bs-ds-cmd) # add cmd show ip interface brief
```

context

To configure context for a data group, use the **context** command under bulkstat data group configuration mode. To remove the context for a data group, use the **no** form of this command.

context *name*
no context *name*

Syntax Description		
	name	Context name to collect data.

Command Default None

Command Modes Bulkstat data group configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

```
RP/0/RP0/CPU0:router (config-bs-dg) # context cont1
```

data-group

To add a data group to a data profile, use the **data-group** command in bulkstat profile configuration mode. To remove a data group from a profile, use the no form of this command.

data-group *name*
no data-group *name*

Syntax Description	*name* — Data group name. The data group should already be configured before being used to add a data group to a profile.

Command Default   None

Command Modes   Bulkstat profile configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines   To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

You can add one or more data groups to a profile, but one data group can be linked to one data profile only.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **data-group** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat profile p1
RP/0/RP0/CPU0:router (config-bs-profile) # data-group data1
```

discard

To discard the raw data for a data group, use the **discard** command under data group configuration mode. To reset back to default, use the **no** form of this command.

discard
no discard

Syntax Description   This command has no keywords or arguments.

Command Default   None

Command Modes   Bulkstat data group configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines   To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **discard** command:

```
RP/0/RP0/CPU0:router (config) # bulkstat data-group d1
RP/0/RP0/CPU0:router (config-bs-dg) # discard
```

enable

To enable a profile for collection and transfer, use the **enable** command in bulkstat profile configuration mode. To disable the profile, use the **no** form of this command.

enable
no enable

Syntax Description	This command has no keywords or arguments.
Command Default	None
Command Modes	Bulkstat profile configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

If the **enable** command is used multiple times, one after the other, the last one in the sequence is considered final.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **enable** command:

```
RP/0/RP0/CPU0:router (config) # bulkstat profile p1
RP/0/RP0/CPU0:router (config-bs-profile) # enable
```

bulkstat filter

To configure a bulk-statistics filter set, use the **bulkstat filter** command in global configuration mode. To remove the filter set configuration, use the **no** form of this command.

bulkstat filter *filter-set-name*
no bulkstat filter *filter-set-name*

Syntax Description

filter-set-name	Name of the bulkstat filter set.

Command Default

None

Command Modes

Global configuration

Command History

Release	Modification
Release 7.0.1	This command was introduction.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **bulkstat filter** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat filter vlan1
```

interval (bs-profile)

To configure interval parameters for a data group, use the **interval** command in bulkstat data group configuration mode. To reset the interval parameters for a data group to the default value, use the **no** form of this command.

interval transfer { **process** *<1800-604800>* | **raw** } *seconds*
no interval transfer { **process** *<1800-604800>* | **raw** } *seconds*

Syntax Description

process*<1800-604800>*	Process files.
raw	Raw files.
seconds	Period in seconds.

Command Default

None

Command Modes

Bulkstat datagroup confihuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **interval** command:

```
RP/0/RP0/CPU0:router ( config-bs-profile) # interval tranfer process 1000
```

object (bs-ds-snmp)

To add an object to an Simple Network Management Protocol (SNMP) data set, use the **object** command in bulkstat snmp data set configuration mode. To remove an object from a data set, use the **no** form of this command.

object {*oid* | *word*} **alias** *alias-name*
noobject {*oid* | *word*} **alias** *alias-name*

Syntax Description	*oid*	Object identifier (in dotted decimal notation).
	word	Object descriptor.
	alias *alias-name*	Name that is associated with an object. If the SNMP agent only can understand the dotted notation OID, you can specifiy an alias name. This name is used to represent the object in the file containing the collected data.

Command Default None

Command Modes Bulkstat snmp data set configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **object** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat data interface-stats type snmp
RP/0/RP0/CPU0:router (config-bs-ds-snmp) # object 1.3.6.1.2.1.2.2.1.10
```

process (bs-dg)

To configure process related parameters for a data group, use the **process** command in bulkstat data group configuration mode. To remove process related parameters from a data group, use the **no** form of this command.

process
no process

Syntax Description	This command has no keywords or arguments.
Command Default	None
Command Modes	Bulkstat data-group configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **process** command:

```
RP/0/RP0/CPU0:router (config) bulkstat data-group d1
RP/0/RP0/CPU0:router (config-bs-dg) # process
```

bulkstat profile

To configure a bulkstat profile, use the **bulkstat profile** command in global configuration mode. To remove the bulkstat profile configuration, use the **no** form of this command.

bulkstat profile *profile-name*
no bulkstat profile *profile-name*

Syntax Description

profile-name	Name of a bulkstat profile.

Command Default   None

Command Modes   Global configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines   To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **bulkstat profile** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat profile bulk1
```

range

To configure a range instance use the **range** command under bulkstat snmp instance configuration mode. To remove the range instance from instance-set configuration, use the **no** form of this command.

range start *id* **end** *id*
no range start *id* **end** *id*

Syntax Description

start *id*	Range Start Instance identifier in OID format.
end *id*	Range End Instance identifier in OID format.

Command Default   None

Command Modes   Bulkstat snmp instance configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines   To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Multiple range(s) can be configured in the same instance set. Overlapping of instances is allowed. System will not check for overlapping instance configuration.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to use the **range** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat instance in-name type snmp
RP/0/RP0/CPU0:router (config-bs-is-snmp) # range start 1 end 10
```

repetition

To configure a repetition instance, use the **repetition** command under bulkstat snmp instance configuration mode. To remove the repetition instance from instance set configuration, use the **no** form of this command.

repetition oid *name* **max** *value*
no repetition oid *name* **max** *value*

Syntax Description		
oid *name*	Object Identifier or descriptor.	
max *value*	Number of maximum possible repetitions. Range is 1-2147483647.	

Command Default

None

Command Modes

Bulkstat snmp instance configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

You can configure multiple repetitions in the same instance set, however, you must avoid overlapping of instances.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to run the **repetition** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat instance in-name type snmp
RP/0/RP0/CPU0:router (config-bs-is-snmp) # repetition oid 1.1 max 100
```

bulkstat data

To configure a bulkstat data set for command type, use the **bulkstat data** command d in global configuration mode. To remove the data set configuration from command type, use the **no** form of this command.

bulkstat data *show-stats* **type command**
no bulkstat data *show-stats* **type command**

Syntax Description	*show-stats*	Name of a data set.
	type	Specifies the type of a data set.
	command	Creates a command data set.

Command Default   None

Command Modes   Global configuration

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines   To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read, write

Example

This example shows how to run the **bulkstat data** command:

```
RP/0/RP0/CPU0:router # config
RP/0/RP0/CPU0:router (config) # bulkstat data show-snmp type command
```

show bulkstat data-group

To display the details of the bulkstat data-group , use the **show bulkstat data-group** command in EXEC mode.

show bulkstat data-group [**word** *data-group name* **process**] [**distribution** | **object** | **percentile** | **summary**]

Syntax Description		
	word	Displays details for the data-group name.
	process	Displays processing data.
	distribution	Displays distribution data.
	object	Displays object-processed data.
	percentile	Displays percentile data.
	summary	Displays summary data .

Command Default	None

Command Modes	EXEC

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read

Example

This example shows how to use the **show bulkstat data-group** command:

```
RP/0/RP0/CPU0:router # show bulkstat data-group
Data-group Name    : dg
Oper state         : Active
Repetitions left   : -
Polling Interval   : 10(secs)
Discard Raw Data   : No
Collect type       : snmp
Data set name      : ds
Instance set name  : is
```

```
DCM Config Result  : /local/snmp/1
DCM Subscription ID: 1
```

show bulkstat profile

To display the details of the bulkstat profile, use the **show bulkstat profile** command in the EXEC mode.

show bulkstat profile [**file** *file-name* | **name** *profile-name*]

Syntax Description	**file** *file-name*	Bulkstat profile-file details.
	name*profile-name*	Bulkstat profile details.

Command Default   None

Command Modes   EXEC

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines   To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
bulkstat	read

Example

This example show how to use the **show bulkstat profile**command:

```
RP/0/RP0/CPU0:router # show bulkstat profile
Profile Name  : pf
Admin Status  : Enabled
Enable Reason : Config
Oper Status   : Active

Data-group's in profile:
Name                              Oper State     Repetitions Left
-----------------------------------------------------------------
dg                                Active
```

This example show how to use the **show bulkstat profile** command with the **file** keyword:

```
RP/0/RP0/CPU0:router # show bulkstat profile file
Profile Name                      : pf
Curr file size                    : 3010(bytes)
Time left for raw data transfer   : 22(secs)
```

show dcm assa

To display the Active Session Slot Array (ASSA) details for DCM, use the **show dcm assa** command in EXEC mode.

show dcm assa

Syntax Description	This command has no keywords or arguments.
Command Default	None
Command Modes	EXEC

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines
To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
dcm	read

Example

This example show the output for the **show dcm assa** command:

```
RP/0/RP0/CPU0:router #  show dcm assa
slot              state
----------------------------------
0                 DCM_ASSA_FREE
1                 DCM_ASSA_FREE
2                 DCM_ASSA_FREE
3                 DCM_ASSA_FREE
4                 DCM_ASSA_FREE
5                 DCM_ASSA_FREE
6                 DCM_ASSA_FREE
7                 DCM_ASSA_FREE
8                 DCM_ASSA_FREE
9                 DCM_ASSA_FREE
10                DCM_ASSA_FREE
```

show dcm client

To get the details of the Data Collection Manager (DCM) client(s), use the **show dcm client** command in the EXEC mode.

show dcm client [*id* | *name*] **subscription id** *value*

Syntax Description		
	id	Client id.
	name	Client name.
	subscription id*value*	Subscription id.

Command Default

None

Command Modes

EXEC

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
dcm	read

Example

This example shows the output for the **show dcm client** commands:

```
RP/0/RP0/CPU0:router #  show dcm client bulkstat-client subscription id 1
client name:    Bulkstat-Client
client id:      1
subscriptions:  1,

data-provider:  snmp
config id        subscription
----------------------------
1                1
```

show dcm data-providers

To display the data-providers for DCM, use the **show dcm data-providers** command in EXEC mode.

show dcm data-providers

Syntax Description	This command has no keywords or arguments.
Command Default	None
Command Modes	EXEC

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
dcm	read

Example

This example shows the output for the **show dcm data-providers** command:

```
RP/0/RP0/CPU0:router #  show dcm data-providers
data-provider name     data provider id
----------------------------------------
cli                             1
snmp                            3
expression                      2

Router#show bulkstat profile
Profile Name  : pf
Admin Status  : Enabled
Enable Reason : Config
Oper Status   : Active

Data-group's in profile:
Name                          Oper State     Repetitions Left
------------------------------------------------------------------
dg                            Active
```

show dcm session

To display the active sessions for DCM, use the **show dcm session** command in EXEC mode.

show dcm session

Syntax Description
This command has no keywords or arguments.

Command Default
None

Command Modes
EXEC

Command History

Release	Modification
Release 7.0.1	This command was introduced.

Usage Guidelines
To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
dcm	read, write

Example

This example shows the display output of the **show dcm session** command:

```
RP/0/RP0/CPU0:router #  show dcm session
```